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Amendment and Response
Serial No.: 09/822,651
Confirmation No.: 9447
Filed: 30 March 2001
For: WEB HAVING DISCRETE STEM REGIONS

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Remarks

The Office Action mailed 12 December 2007 has been received and reviewed. Claims 71, 83, and 94 have been amended. Upon entry of these amendments, claims 71-79, 81-83, 85-90, and 92-115 will remain pending in the present application. Reconsideration and withdrawal of the rejections are respectfully requested.

Claim Objections

Claims 71, 83 and 94 have been amended to address the objection raised in the Office Action.

Grounds Of Rejection To Be Reviewed

- A. Whether claims 103, 111, 114, and 115 are unpatentable under 35 U.S.C. §103(a) over Wessels et al. (U.S. Patent No. 5,669,120).
- B. Whether claims 71-79, 81-83, 86-90, 92-106, and 108-115 are unpatentable under 35 U.S.C. §103(a) over Wessels et al. (U.S. Patent No. 5,669,120) in view of Allen et al. (U.S. Patent No. 5,547,531).
- C. Whether claims 71-79, 81-83, 86-90, 92-106, and 108-115 are unpatentable under 35 U.S.C. §103(a) over Wessels et al. (U.S. Patent No. 5,669,120) in view of Allen et al. (U.S. Patcnt No. 5,547,531) and Provost et al. (U.S. Patent No. 5,606,781).
- D. Whether claims 85 and 107 are unpatentable under 35 U.S.C. §103(a) over Wesscls et al. (U.S. Patent No. 5,669,120) in view of Allen et al. (U.S. Patent No. 5,547,531) and Provost et al. (U.S. Patent No. 5,606,781), further in view of Murasaki (U.S. Patent No. 5,643,651).

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A. Claims 109, 111, 114, And 115 Are Patentable Under 35 U.S.C. §103(A) Over Wessels et al. (U.S. Patent No. 5,669,120)

Claims 109, 111, 114, and 115 stand rejected under 35 U.S.C. §103(a) over Wessels et al. (U.S. Patent No. 5,669,120). Applicants respectfully disagree and request reconsideration and withdrawal of this rejection.

Each of claims 109, 111, 114, and 115 recite a substrate including a first major side and a second major side (wherinc claims 114 and 115 recite that the substrate comprises a fibrous web). The rejected claims also recite a plurality of discrete polymeric regions wherein each discrete polymeric region of the plurality of discrete polymeric regions has a perimeter that is entirely bordered (or entirely surrounded, as recited in claims 114 and 115) by the first major side of the substrate (or the first major side of the nonwoven web, as recited in claims 114 and 115), wherein the plurality of discrete polymeric regions are located only on the first major side of the substrate, and wherein the polymer forming the plurality of polymeric regions does not extend through the substrate to the second major side of the substrate (or does not form the second major side of the substrate, as recited in claim 111).

These features are neither taught nor suggested by Wessels et al.

In support of this rejection it was asserted that "[i]n the absence of definition, the term 'substrate' has been given broadest reasonable interpretation in light of the supporting disclosure (Office Action delivered 12 December 2007, page 4, item 7, lines 5-7), and this assertion was used to contend that the pile core sheet S that is embedded in the synthetic resin of Wessels et al. is considered a "substrate" according to claims 109, 111, 114, and 115. It was stated that:

"a polymer film 4a [of Wessels et al.] with embedded S can be broadly interpreted as substrate as claimed. Therefore, the polymer regions of Wessels et al. [sic] are **not** actually formed by forcing molten polymer *through the substrate* but formed by extruding a film 4a of a molten polymer (claimed substrate), joining the polymer film 4a with a fabric S, then forcing the

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upper portion of molten polymer 4a *through* the fabric S into cavities (See Fig. 5). As a result, the polymer of the plurality of polymeric regions in Wessels et al. does not extend through the substrate 4a with embedded fabric S as shown in Figs. 4B and 4F."

Office Action dated 12 December 2007, page 4, item 7, lines 10-16.

Wessels et al. does not, however, disclose or suggest a substrate in the form of a "film" before the polymer forming the hooks is forced through the pores of the substrate S as asserted by the Examiner. Rather, the polymer layer 4a is formed at the same time as the hooks 4b as described in Wessels et al. (a portion of Column 7 of Wessels et al. is reproduced below).

For molding the surface fastener of this invention on the apparatus, the molten resin 4 to be continuously injected from the injection die 1 at a predetermined molten resin pressure is continuously forced into the gap between the injection die 1 and the rotating die wheel 2. At the same time, the pile core sheet S is guided with the piles being received in the annular recesses 16 of the die wheel 2, and part of the molten resin 4 penetrates into the foundation structure of the pile regions S1 at the injection-outlet side, while part of the molten resin 4 is extruded onto the circumferential surface of the die wheel 2 through the pores of the coarse mesh regions S2, filling in the hook-element-forming cavities 5a successively to form hook elements 4b as the molten resin 4 is expanded uniformly over the circumferential surface of the die wheel 2. As a result, the molten resin 4 remaining on the injection outlet of the injection die 1 and the expanded molten resin 4 are fused with the component material of the pile core sheet S to form the substrate sheet 4a having a predetermined thickness.

A second process also disclosed by Wessels et al. is described in the excerpt below (taken from Columns 8 and 9).

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- 55 According to the thus constructed apparatus, the molten resin 4 extruded from the extrusion nozzle 11 is introduced to the gap between the press roller 13 and the pile core sheet S, which is introduced along the circumferential surface of the die wheel 2, to be forced through the pores of the pile core sheet S to the circumferential surface of the die wheel 2 by the pressing force of the pressing roller 13. The pile core sheet S is guided with the piles being received in the annular recesses 16 of the die wheel 2, and at the same time, part of the molten resin 4 penetrates into the foundation structure of the pile regions S1 at the extrusion-outlet side while part of the molten resin 4 is extruded onto the circumferential surface of the die wheel 2 through the pores

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of the coarse mesh regions S2, filling in the hook-element-forming cavities S3 successively to form hook elements 4b as the molten resin 4 is expanded uniformly over the circumferential surface of the die wheel 2. The thus molded surface fastener of this invention travels along substantially 5 a quarter of the die wheel 2 and is then continuously removed off the circumferential surface of the die wheel 2 as positively take up by the take-up rollers 6, 7 via the guide roller 9.

As a result, Wessels et al. do not teach a polymer "film" that is separate from the hook elements 4b. Rather, Wessels et al. teach that substrate 4a is formed when molten resin 4 is forced through the pores of the coarse mesh region of S2 that allow for the passage of molten resin 4 (Wessels et al., col. 6, lines 31-33). Thus, the polymer used to form the hook elements 4b is that same polymer used to form the substrate 4a (after being forced through the mesh regions S2 from the surface opposite the surface including the hook elements 4b).

In contrast, each of rejected claims 109, 111, 114, and 115 recites a web construction or mechanical fastener that includes, *inter alia*, a substrate having first and second major sides, and

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a plurality of discrete polymeric regions located only on the first major side of the substrate, wherein the polymer forming the plurality of polymeric regions does not extend through the substrate to the second major side of the substrate. That is, these claims recite a substrate having discrete polymeric regions on one side of the substrate, and the polymer that forms the polymeric regions does not extend through the substrate to the side of the substrate opposite the side that includes the discrete polymeric regions.

In contrast, Wessels et al. teach only a pile woven or knitted core sheet including coarse mesh regions S2, with polymer that extends from a first major side through to a second major side as discussed above.

In response to Applicants' previously-submitted arguments on this point, it was asserted by the Office that "patentability of a product is independent of how it is made." Applicants do not disagree with this assertion, but note that it addresses patentability of an invention – not the effect of the teachings of a reference used in support of a rejection. A more proper standard to apply in a situation such as this is the axiom that all of the teachings of a reference must be considered when determining patentability of claims in view of that reference. *See, e.g., MPEP § 2141.03(VI)* (excerpt reproduced below).

VI. PRIOR ART MUST BE CONSIDERED IN ITS ENTIRETY, INCLUDING DISCLOSURES THAT TEACH AWAY FROM THE CLAIMS

A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984) (Claims were directed to a process of pro-

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When considering the teachings of Wessels et al. *as a whole*, it is clear that the only constructions taught therein cannot support the asserted obviousness rejection because the polymer used must be present on both major surfaces of the constructions.

Thus, the articles of Wessels et al. do not meet the requirements of claims 109, 111, 114, and 115. As a result, Wessels et al. do not, and cannot, support a *prima facie* case of obviousness with respect to claims 109, 111, 114, and 115.

Claims 109 & 111

Each of claims 109 and 111 recites that the polymer "does not . . . form the second major side of the substrate." And it is admitted in the Office Action that "Wessels et al. do not teach that a second side of the substrate is free of the polymer making up the plurality of discrete polymeric regions." Office Action, p. 5, lines 2-3, December 12, 2007. In other words, the Examiner has indicated that polymer making up the discrete polymeric regions of Wessels et al. is present on the second major side of the constructions disclosed by Wessels et al. – in direct contrast to the recitations found in claims 109 & 111.

In spite of this, the Examiner has rejected claims 109 & 111 as obvious in view of Wessels et al. Applicants respectfully submit that a *prima facie* case of obviousness has not, however, been presented with respect to claims 109 & 111 in view of the issues raised herein.

Summary

In view of the foregoing comments, Applicants respectfully submit that a *prima facie* case of obviousness has not been established with respect to claims 109, 111, 114, and 115 over Wessels et al. Reconsideration and withdrawal of this obviousness rejection of claims 109, 111, 114, and 115 are respectfully requested.

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- B. Claims 71-79, 81-83, 86-90, 92-106, and 108-115 are patentable under 35 U.S.C. §103(a) over Wessels et al. (U.S. Patent No. 5,699,120) in view of Allen et al. (U.S. Patent No. 5,547,531)

Claims 71-79, 81-83, 86-90, 92-106, and 108-118 stand rejected under 35 U.S.C. §103(a) over Wessels et al. (U.S. Patent No. 5,699,120) in view of Allen et al. (U.S. Patent No. 5,547,531). Applicants respectfully disagree and request reconsideration and withdrawal of this rejection.

Independent claims 71, 83, 94, and 109-113 all recite an article including a plurality of discrete polymeric regions on the first major side of the substrate, wherein each discrete polymeric region of the plurality of polymeric regions comprises a discrete patch of polymer having a perimeter that is entirely bordered or surrounded by the first major side of the substrate.

The asserted obviousness rejection of claims 71-79, 81-83, 86-90, 92-106, and 108-118 does not, however, address this feature in any meaningful manner in connection with any of the obviousness rejections identified above.

Instead, the Examiner relies on the teachings of column 10, lines 53-60 of Wessels et al. as support for an assertion that Wessels et al. discloses or suggests changing the shape and/or spacing of the polymer regions containing the hooks. Applicants respectfully disagree and have reproduced the cited portion of Wessels et al. below:

Further, since the pile core sheet is manufactured by weaving or knitting, it is possible to change the design of the pile core sheet in arrangement and orientation of piles and to determine the size, shape or arrangement of hook elements optionally. It is accordingly possible to cope instantly with various requirements for the surface fastener in which hook and loop elements coexist.
Wessels et al., col. 10, lines 53-60.

A careful review of the cited portion of Wessels et al. however, reveals that it does not provide support for changes in the size and/or shape of the polymer regions containing hooks.

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Rather, the variations in "size, shape or arrangement" are discussed for the "hook elements" themselves – not for the size and/or shape of the polymer regions that contain the hooks as asserted in support of this rejection.

As discussed in the previous responses, Wessels et al. discloses only constructions in which polymeric regions on the first major side of the substrate are continuous, i.e., the continuous polymeric regions of Wessels et al. do not "have a perimeter that is entirely bordered by the first major side of the substrate" as recited in the rejected claims. *See, e.g.*, Wessels et al., Figures 3 and 6-8.

As discussed herein, Wessels et al. teaches articles in which a surface fastener is formed by passing a substrate through an injection molding or extrusion apparatus to form continuous web that includes continuous fastener regions surrounded on one or two sides by the substrate. In other words, the fastener regions are provided in the form of continuous stripes that extend along the length of the web (*see, e.g.*, Wessels et al., Figures 3 & 6).

Although the assertion has been made that the difference between "a discrete patch having a perimeter that is entirely bordered by the first major side of the substrate" and the continuous stripes of polymer taught by Wessels et al. is a mere matter of design choice, no compelling support or reasoning is provided for that conclusory assertion.

A change from the continuous stripes of Wessels et al. to the discrete patches of the claimed invention is a change in the basic properties of the different polymeric regions. The basic nature of the differences in the proposed change is demonstrated by the fact that the entire disclosure of Wessels et al. is focused on how to form continuous stripes of polymer hooks – no part of the disclosure of Wessels et al. teaches or suggest that the apparatus and methods disclosed therein could be used to provide "discrete patches" as recited in each of independent claims 71, 83, 94, and 109-113.

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In view of the foregoing,, Applicants respectfully submit that a *prima facie* case of obviousness has not been established for claims 71-79, 81-83, 86-90, 92-106, and 108-118 based on Wessels et al. in view of Allen et al. Reconsideration and withdrawal of this obviousness rejection of claims 71-79, 81-83, 86-90, 92-106, and 108-115 are, therefore, respectfully requested.

- C. **Claims 71-79, 81-83, 86-90, 92-106, and 108-115 are patentable under 35 U.S.C. §103(a) over Wessels et al. (U.S. Patent No. 5,669,120) in view of Allen et al. (U.S. Patent No. 5,547,531) and Provost et al. (U.S. Patent No. 5,606,781)**

Claims 71-79, 81-83, 86-90, 92-106, and 108-115 stand rejected under 35 U.S.C. §103(a) over Wessels et al. (U.S. Patent No. 5,669,120) in view of Allen et al. (U.S. Patent No. 5,547,531) and Provost et al. (U.S. Patent No. 5,606,781). Applicants respectfully disagree and request reconsideration and withdrawal of this rejection.

These same claims were rejected over Wessels et al. and Allen et al., *supra*, and Applicants traverse this rejection for the same reason as discussed with respect to the previous rejection.

In the present rejection, Provost et al. are cited to provide evidence that, e.g., hooks can be integrally molded with a base, can be co-extruded with a base, or can be provided on a thin base and laminated to a different sheet to form a substrate (Office Action delivered 12 December 2007, page 6, line 16 to page 7, line 2. Applicants submit, however, that Provost et al fail to provide elements missing from the combination of Wessels et al. and Allen et al. For example, Provost et al. fail to provide a plurality of discrete polymeric regions fused (or attached, claims 114 and 115) to the first major surface of the substrate, wherein each discrete polymeric region is entirely bordered or surrounded by the first major side of the substrate (claims 71, 83, 94, 109, and 111- 115) nor do Provost et al. teach or suggest an elastic substrate (claims 83 and 110).

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For at least the foregoing reasons, Applicants submit that a *prima facie* case of obviousness has not been established with respect to claims 71-79, 81-83, 86-90, 92-106, and 108-115 over Wessels et al. in view of Allen et al. and Provost et al. Reconsideration and withdrawal of this rejection are, therefore, respectfully requested.

D. **Claims 85 and 107 are patentable under 35 U.S.C. §103(a) over Wessels et al. (U.S. Patent No. 5,669,120) in view of Allen et al. (U.S. Patent No. 5,547,531) and Provost et al. (U.S. Patent No. 5,606,781), further in view of Murasaki et al. (U.S. Patent No. 5,643,651)**

Claims 85 and 107 stand rejected under 35 U.S.C. §103(a) over Wessels et al. (U.S. Patent No. 5,669,120) in view of Allen et al. (U.S. Patent No. 5,547,531) and Provost et al. (U.S. Patent No. 5,606,781), further in view of Murasaki et al. (U.S. Patent No. 5,643,651). Applicants respectfully disagree and request reconsideration and withdrawal of this rejection.

Claim 85 depends from claim 83 and claim 107 depends from claim 106. As discussed herein, these independent claims are patentable over the combination of Wessels et al., Allen et al., and Provost et al. Similarly, Murasaki et al. does not address the basic deficiencies of the combination of Wessels et al., Allen et al., and Provost et al.

For at least the foregoing reasons, Applicants submit that a *prima facie* case of obviousness has not been established with respect to claims 85 and 107 over Wessels et al. in view of Allen et al., Provost et al., and Murasaki et al. Reconsideration and withdrawal of this rejection are, therefore, respectfully requested.

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SUMMARY

For the foregoing reasons, Applicants respectfully request reconsideration and withdrawal of the rejections of claims 71-79, 81-83, 85-90, and 92-115 as discussed herein.

Respectfully submitted by

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14 APRIL 2008

Date

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CERTIFICATE UNDER 37 CFR §1.8:

The undersigned hereby certifies that the Transmittal Letter and the paper(s), as described hereinabove, are being transmitted by facsimile in accordance with 37 CFR §1.6(d) to the Patent and Trademark Office, addressed to Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 14th day of April, 2008, at 3:15 pm (Central Time).

By: Dini Montz
Name: Dini Montz